

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for preparing an aqueous alkali metal acrylate solution by distillatively removing acrylic acid from an acrylic acid-containing mixture and generating an aqueous alkali metal acrylate solution from the distillatively removed acrylic acid and an aqueous solution of a basic alkali metal salt, which comprises

- a) feeding the acrylic acid-containing mixture to a distillation apparatus,
- b) carrying out the removal of the acrylic acid from the acrylic acid-containing mixture in the distillation apparatus above the feed point and
- c) generating the aqueous alkali metal acrylate solution in such a manner that the acrylic acid removed in the distillation apparatus is taken up immediately from the gas phase into an aqueous solution of at least one alkali metal compound selected from the group consisting of an alkali metal hydroxide, an alkali metal carbonate and/or and an alkali metal hydrogencarbonate.

Claim 2 (Currently Amended): The process as claimed in claim 1, wherein the alkali metal acrylate of said use of an aqueous alkali metal acrylate solution, which has been prepared by a process as claimed in claim 1 for preparing optionally with at least one comonomer polymerizable with said alkali metal acrylate, is subjected to polymerization to form a polyacrylate.

Claim 3 (Currently Amended): The process as claimed in claim 1, wherein the acrylic acid removed in the distillation apparatus is taken up immediately from the gas phase into said [[an]] aqueous solution of an alkali metal hydroxide, an alkali metal carbonate and/or an

alkali metal hydrogen carbonate in a polymerization apparatus, and is polymerized in said apparatus.

Claim 4 (New): The process as claimed in claim 1, wherein removal of the acrylic acid is carried out above a chimney tray mounted in the distillation apparatus, which chimney tray is configured in such a manner that although gas phases can rise through the chimney, no liquid phase can reflux through it into the distillation apparatus.

Claim 5 (New): The process as claimed in claim 4, wherein the aqueous solution of said at least one alkali metal compound is atomized and sprayed as finely divided droplets, and the acrylic acid is taken up into said finely divided droplets.

Claim 6 (New): The process as claimed in claim 5, wherein said finely divided droplets have a droplet size of from 0.1 to 5 mm.

Claim 7 (New): The process as claimed in claim 6, wherein said finely divided droplets have a temperature of from 10 to 60°C.

Claim 8 (New): The process as claimed in claim 5, wherein said atomizing is carried out with an impingement atomizer.

Claim 9 (New): The process as claimed in claim 8, wherein said impingement atomizer contains an impingement plate, and the aqueous solution of said at least one alkali metal compound is directed toward the impingement plate at a flow velocity of from 20 to 80 km/h.

Claim 10 (New): The process as claimed in claim 1, wherein a portion of the aqueous alkali metal acrylate solution is cooled and then recycled into the distillation apparatus.

Claim 11 (New): The process as claimed in claim 10, wherein recycle is carried out at a temperature of from 10 to 60°C.

Claim 12 (New): The process as claimed in claim 1, wherein said process is carried out continuously.

Claim 13 (New): The process as claimed in claim 3, wherein a polymerization inhibitor is not added to the aqueous alkali metal acrylate solution.

Claim 14 (New): The process as claimed in claim 1, wherein a free radical storage inhibitor is added to the aqueous alkali metal acrylate solution.

Claim 15 (New): The process as claimed in claim 3, wherein polymerization is carried out in the presence of at least one comonomer polymerizable with acrylic acid.

Claim 16 (New): The process as claimed in claim 15, wherein a superabsorber is formed as a product of said polymerization.

DISCUSSION OF THE AMENDMENT

Claim 1 has been amended to clarify that the aqueous solution contains at least one of alkali metal hydroxide, alkali metal carbonate, and alkali metal hydrogencarbonate. Claim 2 has been amended into a process claim. Claim 3 has been amended to require a polymerization step.

New Claims 4-16 have been added, to claim various preferred embodiments described in the specification.

No new matter is believed to have been added by the above amendment. Claims 1-16 are now pending in the application.